



# Kentucky Geologists

Volume 9 Issue 2

December 2007

## Mission

The mission of the Board of Registration for Professional Geologists is to regulate the public practice of geology in the Commonwealth of Kentucky to protect the citizens of the Commonwealth from negligent, incompetent, or fraudulent practices.

## Board

Michael P. Sanders, *Chair*  
Doug Reynolds, *Vice Chair*  
Thomas P. Ryavec  
Robert E. Fox, *Public-at-Large*  
James C. Cobb, *State Geologist, Ex-Officio*

## Kentucky Division of Occupations & Professions

Claude Wagner, *Director*  
Dana Hockensmith,  
*Board Administrator*

## Office of the Attorney General

Mark Brengelman,  
*Board Attorney*

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<http://finance.ky.gov/ourcabinet/caboff/OAS/op/progeo/>

As an agency of the Commonwealth of Kentucky, the Kentucky Board of Registration for Professional Geologists is solely funded by applicants and credential holders, and receives no tax dollars.

## ASBOG Annual Conference

by Doug Reynolds and Tom Ryavec

The ASBOG Annual Conference was held in Denver, Colorado from October 23 through October 27, 2007. Doug Reynolds and Tom Ryavec attended this conference as representatives of the Kentucky Board of Registration. Doug attended the Executive Committee sessions while Tom participated as a member of the Council of Examiners.

## Executive Committee

**ASBOG Foundation.** A vote was taken to move forward with the formation of an ASBOG Foundation. It will be a separate, free-standing entity that will exist for the sole purpose of distributing the interest earned on its holdings to ASBOG. Its formation is an attempt to forestall a shrinking fund balance in the ASBOG accounts by creating a new funding source and avoiding excessive increases in exam fees and dues. The target for the initial endowment is \$5,000,000. The measure passed nearly unanimously.

**Dues and exam fees.** Not taking anything for granted, the Executive Committee asked for a vote to endorse development of a revised dues and exam fee structure. A proviso was added to the measure from the floor that required approval of revisions to lead any increases by no less than three years. The measure passed unanimously.

**New officers.** A new slate of officers was elected unanimously as follows:

President: Wilson H. Herrod (WY)  
President Elect: Lisa E. Hosey (MO)  
Treasurer: Michael R. Kunz (MN)  
Secretary: Richard K. Spruill (NC)  
Past President: William G. Dixon, Jr. (IL)

**Future nominations.** ASBOG is implementing a new method for nominating future members to the Executive Committee. This method will entail soliciting names from the member boards. The current leadership asked each board to give careful consideration to nominations and asked particularly for names from states that had not yet placed a person on the Executive Committee.

**Selected state reports.** There were a few notable items in the state reports. Arkansas has needed to deal with complaints that insurance adjusters were making geologic judgments.

Delaware, in setting out to make allowance in their law for dealing with chemically dependent practitioners, ended up having to open up and re-tool their entire law.

Tennessee has passed a practice act that becomes effective January 1, 2008; they will begin administering examinations in 2009. They will soon be full participating members of ASBOG.

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## Welcome New Registrants!

### Professional Geologists

#### 06/28/2007:

Christopher T. Coonfare (OH)  
Ambrose J. Madaj III (TN)  
Eric Pigati (AZ)  
John F. Szturo (MD)

#### 08/06/07:

Stephen Duane Olmore (FL)

#### 08/20/07:

Shavonne Diane Gordon (OH)

#### 08/22/07:

Kyo Ho Cho (IN)  
Jeffrey L. Paetz (OH)  
Thomas W. Whitehead (CA)

#### 09/05/2007:

Juliet E. Port (IN)

#### 09/19/2007:

Susan E. Grover (IN)

#### 11/26/2007:

James M. Caldwell (TN)  
Shane A. Goodnight (KY)  
Robert D. Newman (KY)

### Geologists-in-Training

No new Geologists-in-Training were added to the roster since the last issue of the newsletter.

### Total registrants

1579 Professional Geologists  
7 Geologists-in-Training

## Calendar

### Board Meetings Tentative 2008 Schedule

February 4  
April 7  
June 2  
August 4  
October 6  
December 1

**Time:** 1:30 p.m. (EST)

**Location:**  
Div. of Occupations & Professions  
911 Leawood Drive  
Frankfort, Kentucky

*Note: Dates are subject to change. Please call the Board office, if you plan to attend.*

## 2008

### Exam dates Application deadlines

March 7 January 4  
October 3 August 4

### ASBOG 2008 Annual Conference

October 28 – November 2  
Chicago, IL

### Council on Examiners Workshops

April 4 – 5 Cody, WY  
October 29 – 30 Chicago, IL

## Board Actions

### Complaint review report

Every complaint that has come before the Board in 2007 has been investigated. At this time, one complaint is under investigation to determine whether there is an apparent violation of the law.

### Board legal actions

No actions were finalized since the last announcements.

### Licensee disciplinary actions

No actions were finalized since the last announcements.

## Renewals

The deadline for submitting registration renewals without a penalty was September 30, 2007. Late renewal fees (\$75) can be submitted through December 29, 2007. After that date names are deleted from the roster until renewal fees are paid.

When a renewal fee is not paid for two consecutive renewal periods, the individual's certificate of registration is revoked. For reinstatement, the individual must then reapply to the Board as a new applicant.

Registrations can be renewed online at the Board's website: <http://finance.ky.gov/ourcabinet/caboff/OAS/op/progeo/>

### ASBOG exam results

October, 2007

**Fundamentals** 3 passed; 8 tested  
**Practice** 3 passed; 8 tested



## Raising our professional profile to meet today's challenges

by *Kenneth W. Kuehn, PhD, PG*  
*kenneth.kuehn@wku.edu*

When I last wrote to *Kentucky Geologists* in November 2004 (v. 6, issue 2), we had just launched a new curriculum in the geology major here at Western Kentucky University. It was a bold step, one that involved our becoming the first degree program at WKU to allow students to choose either a BA or BS degree option. This strategy allowed us to increase the rigor in our BS program and to build our enrollment overall. It was also one that was initially met with numerous questions and a bit of resistance. Now, I'd like to provide an update on our program as well as address one of the major challenges facing the continued good health and growth of our profession in the Commonwealth.

According to data from the Kentucky Council on Postsecondary Education (CPE), more than 2,500 baccalaureate biology degrees were awarded in Kentucky during the five-year period from 2002-06. Can you estimate the number of geology degrees granted during the same period? WKU led the way with 47, UK had 42, and the total for all six universities with geology degree programs was 181. That averages to about 6 geologists per university per year, a number that is the lowest among the sciences (even physics had 204!). It is interesting that in 2002, the price of oil was under \$30 per barrel and though today it is above \$90, there is no corresponding upward trend in our graduation data statewide. And last year, the American Geological

Institute (AGI) reported survey results that showed less than 3% of all college students nationwide were enrolled in an introductory geoscience course in 2004 – 05!

A colleague once commented that geologists are like brain surgeons – society needs them, just not a lot of them! That may be so, but there is a larger problem we must take on: How can we increase the awareness of what our profession actually contributes to society? Does the public make the connection between oil and geology? Do they realize that the largest sector of employment for geologists today is the environment? Each of us must take an active role in this most important task. We must turn our faces away from the outcrop and toward the public, and work diligently to increase the visibility and renown of our profession. We must learn to use the media to our advantage. We must enliven our young students while they are taking Earth Science classes, generally in the fourth and sixth grades and in middle school. They are the ones who must go on to enroll in introductory geology courses in college because they create the pool from which we attract most of our majors. University administrators are concerned with credit hour production and graduation rates, and the public wants more knowledge and accountability for its investment of tax dollars. Let's use this current upswing to full advantage, to attract new people into geology and to demonstrate to all that we are a vibrant, engaged, and essential profession.

Two of our professional societ-



*Kenneth W. Kuehn, PhD, PG*  
*Western Kentucky University*

ies, the Kentucky Section of the American Institute of Professional Geologists (AIPG) and the Kentucky Society of Professional Geologists (KSPG), are working together to develop a comprehensive program for public outreach. I encourage you to become active in their efforts and to communicate the need for geologists. Your experience and knowledge have great value and great potential for advancing our profession for the purpose of equipping society to meet the energy and environmental challenges we face today.

Rotational Equilibrium of  
Multilayered Earthworks (REAME)

### 2008 Short Course

University of Kentucky  
Lexington, Ky  
January 8 – 10, 2008

For more information call 859-257-2820  
or email [gcaylor@engr.uky.edu](mailto:gcaylor@engr.uky.edu).



***ASBOG Officers at Executive Committee meeting, October 2007. Left to right: Wilson Herrod (ASBOG President Elect), William Dixon, Jr. (ASBOG President); Doug Reynolds (Kentucky Board Vice Chairman); Lisa Hosey (ASBOG Treasurer); and Sam Christiano (ASBOG Executive Director).***

*ASBOG Annual Meeting  
continued from page 1*

## **Council of Examiners**

The Council of Examiners workshop lasted two full days. The purpose of these sessions was to review the examination that had just been given this past September and also review the examination that would be given in the spring of 2008. The participants were split into two groups, one group worked on the Fundamentals of Geology (FG) examination while the other group worked on the Practice of Geology examination. Mr. Ryavec selected the practice examination to review.

The tests are analyzed statistically to determine their acceptability as licensing exams. Reliability refers to the consistency or precision of measurement that a test provides. The range of this index is from zero to one where a value greater than 0.70 is generally considered acceptable for this type of exam. Typically the reliability coefficient will be higher if the test is composed of quality questions that discriminate well and assess competency of the test taker. The average reliability for the FG exam given over the past 15 years is 0.85 and for the test given in March

2007 the reliability is 0.88. The average reliability for the PG exam over the past 15 years is 0.73 and for the exam given this past March the reliability is 0.83. Both tests continue to improve with notable upward trends in the performance levels since 1992. The difference between the reliabilities of the two exams correlates to the difference in lengths of the exams; higher reliability coefficients are normally associated with longer tests. The fundamentals exam has 130 questions, whereas the practice exam has 100 questions.

Each participant was provided a copy of the September test and allowed the time necessary to complete the questions. Each question was discussed by the group. This discussion had several objectives (1) to determine the validity of the keyed answer for each question so that there would not be more than one answer in the choices provided for each question; (2) to evaluate the content and purpose of the question as to the geologic principle being tested, and (3) to ensure that a practicing geologist with five years of experience would be able to reasonably answer the question. The PG exam attempts to test the candidate's knowledge base in a variety of geologic areas, such as field geology, petrology, paleontology, hydrogeology, environmental geochemistry and economic geology, to list a few. The number of questions in each area of

geology became a point that was vigorously discussed so the examination would not be heavily weighted in one single area. The same process was repeated during the second day for the exam that will be given in March, 2008.

ASBOG continues to investigate ways to improve the testing and tracking of student performance on the FG exam; continues to promote the FG exam as an exiting examination for degree-granting geology programs; continues to investigate the implementation of an ethics portion on the PG exam and the possibility of dividing the PG exam into several distinct areas of practice.

The Council of Examiners portion of the conference is extremely important and the work done by the representatives from the state boards and universities during these sessions continues to improve the examination as demonstrated by the improving test statistics. This process can be fairly intense, but is rewarding in terms of ensuring that the professional geologist examinations continue to be relevant and, if challenged, can hold up under very close scrutiny.



## Energy Incentives Law

by Mike Lynch

*Kentucky Geological Survey*

Efforts to enhance Kentucky's national position in energy research got a boost when the second special session of the 2007 Kentucky General Assembly approved the "Incentives for Energy Independence Act," which Gov. Fletcher signed into law. The bill included an allocation of \$5,000,000 to the Kentucky Geological Survey (KGS) for research into carbon sequestration and enhanced oil and gas recovery. KGS will work with partners in the energy industry and others to drill deep wells in both the eastern and western Kentucky coal fields to achieve the bill's mandate of "performing the analysis necessary to estimate the potential for enhanced oil and gas recovery, enhanced coalbed methane recovery, or permanent storage of sequestration of carbon dioxide."

"I believe these wells will need to be drilled from 3,500 to 8,500 feet deep, and possibly deeper, depending on the geologic conditions," says KGS Director Jim Cobb, who testified before committees of both the Kentucky House and Senate during the week-long special session in August. He explained that permanent sequestration of carbon

dioxide requires conditions that cause the gas to become a liquid.

The major intended purpose of the bill is to provide state-funded incentives for companies to locate facilities in Kentucky for developing alternative energy sources from Kentucky resources, including coal and agricultural crops such as corn. The session was called by Gov. Fletcher in response to the possibility that Peabody Energy could construct a coal gasification plant in western Kentucky.

However, Cobb says the funding to KGS will provide valuable research information on sequestration and enhanced resource recovery that will be useful for any prospective industry interested in these issues. There are growing expectations that controls on carbon dioxide emissions will eventually be required by law due to concerns about global climate change.

The energy bill also appropriated \$2 million to the University of Kentucky's Center for Applied Energy Research to investigate alternative fuel production technology "to allow industry to rapidly incorporate alternative fuel production technologies into plant design and construction."

## Introduction to ArcGIS I, v. 9.1

For information about 2008 course offerings, contact Matt Crawford, Kentucky Geological Survey, [mcrawford@uky.edu](mailto:mcrawford@uky.edu), 859-257-5500 x140.

## American Association of Petroleum Geologists

Annual Meeting  
April 20 – 23, 2008  
San Antonio TX  
<http://www.aapg.org>

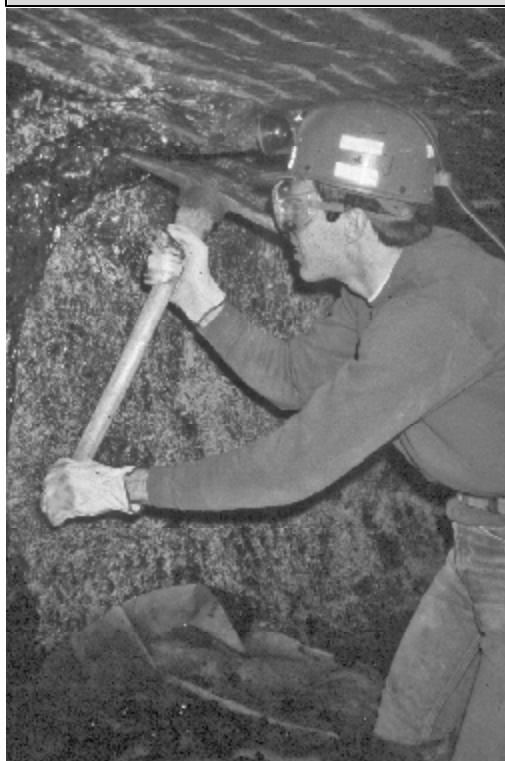
## Geological Society of America

### North Central Meeting

April 23 – 25, 2008  
Evansville, IN  
<http://www.geosociety.org/sectdiv/Northc/08mtg/>

### Southeastern Meeting

April 10 – 11, 2008  
Charlotte, NC  
<http://www.geosociety.org/sectdiv/southe/08mtg/index.htm>



*Drew Andrews sampling the Fire Clay coal seam in Perry County, Kentucky.*

**Kentucky Geologists** is published semiannually by the Kentucky Board of Registration for Professional Geologists. The publication features topics relevant to the ethical practice of geology in the Commonwealth. Suggestions for the newsletter should be directed to Judith Hower, Communications Specialist, Kentucky Geological Survey, 228 Mining & Mineral Resources Building, University of Kentucky, Lexington KY 40506-0107, (859) 277-0777; FAX (859) 257-1147 <jhowe2@pop.uky.edu>.



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